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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Anthony Scott Oddo

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EXAMINER

SAWAGED, SARI S

ART UNIT

PAPER NUMBER

2623

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/677,862	Applicant(s) ODDO ET AL.	
	Examiner SARI SAWAGED	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/18/2007 have been fully considered but they are not persuasive.
2. Applicant argues that Schlack uses signature profiles and that a single signature profile does not necessarily reflect preferences of only one viewer and would not necessarily contain the complete viewer's profile. The Examiner respectfully disagrees. While Schlack discusses signature profiles, Schlack also discloses that his invention generates viewer profiles and distinguishes between viewers in a multi-viewer household (see col. 6 lines 26-35), where knowledge about the viewing habits of a single viewer are placed in the viewer's profile
3. Applicant argues that Schlack does not interpret signals such as changing a channel, e.g. to determine whether the viewer likes a program. Thus, Schlack does not update a program score or genre score or both when "a parsed command signal is changing a channel". The examiner respectfully disagrees. Schlack uses channel changes, channel change rates, viewing durations/dwell times, surfing sequences, volume changes/habits, amount of TV watched, EPG activity, etc... to determine whether a viewer likes a program/network/genre (see col. 12 line 65 to col. 13 line 18 and col. 23 lines 34-50). These signals are parsed and are directly related to the program/genre scores.

4. Applicant argues that Schlack does not teach parsing signals dynamically. The examiner respectfully disagrees. Schlack discloses parsing signals dynamically (see col. 7 lines 10-12, col. 17 lines 15-24, col. 25 lines 19-21).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. The term **"relevant"** in claims 8, 9, 10, and 15 is a relative term which renders the claim indefinite. The term "relevant" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. On page 12 lines 35-40 of the specification, the applicant discloses "the relevance of the events to the viewer – for example, determining whether or not the viewer likes a particular show". The disclosure fails to clearly define what the term "relevance" or "relevant" means with respect to a viewing event or the degree that the term "relevant" depicts whether a viewer likes or dislikes a particular program. Appropriate action is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 1-15 are rejected under 35 USC 102(e) as being unpatentable over Schlack et al. (hereinafter referred to as Schlack) (US 7,260,823).**

Claims 1 and 2:

Schlack discloses a method for generating a viewing recommendation comprising:

Parsing dynamically (see col. 7 lines 10-12, col. 17 lines 15-24, col. 25 lines 19-21), in accordance with a set of stored processing rules (see col. 13 lines 15-18, col. 20 lines 33-38) a stream of command signals generated by a control unit in response to control sequences entered into the control unit by a viewer to generate information representative of the viewer's viewing behavior (see col. 11 lines 34-37, col. 17 lines 15-24), wherein the parsing comprises interpreting at least one signal from the stream of command signals based on the viewer profile (see col. 6 line 65 to col. 7 line 9);

Updating dynamically the viewer profile of the viewer based on the generated information representative of the viewer's viewing behavior (see col. 7 lines 10-19 and col. 17 lines 15-19); and

Determining, based on the viewer's profile at least one viewing recommendation (see col. 36 lines 51-55).

Claim 3:

Schlack describes wherein the parsing further comprises:

ignoring power events (see figs. 27A-28C and col. 24 line 54 to col. 25 line 21; Schlack describes different concepts of how sessions can be defined. Specifically in figs. 27B and figs 28A-C Schlack discloses ignoring power events because a STB can be left on for long periods of time or viewers can change frequently at transition points between day parts).

Claim 4:

Schlack discloses wherein the viewer profile comprises:

a surfing history of the viewer (see col. 17 lines 35-53).

Claim 5 and 6:

Schlack discloses wherein the surfing history comprises:

no more than a pre-defined number of surfing channels, each surfing channel having a corresponding total duration value (see col. 20 line 60 to col. 21 line 10),

and wherein a pre-determined number of the pre-defined number of surfing channels are designated as top surfing channels (see Fig. 25A-D and col. 22 lines 61-65; Schlack discloses a “Networks” column in Figs. 25A-B that lists surf networks “that are desirable to track”. The examiner takes “desirable to track” to mean that this list is not inclusive of all surf channels but the ones that are visited most frequently and/or with the most dwell time (i.e. the top surf channels). Schlack discloses a broader list of surf channels, especially in Fig. 25D where a graph of the average channel dwell time for all networks in a given session is given. The number of surf channels shown in Fig. 25D is much larger than the surf channels shown in Fig. 25A-B, where only the “desirable to track” channels are listed).

Schlack discloses “viewing time of the each surfing channel during a pre-defined period of time” as a session (see col. 23 lines 14-21), where a session can be a specific window of time or day-part (see col. 6 lines 60-64).

Claim 7:

Schlack discloses wherein a surfing channel having the total duration value below a pre-defined threshold is removed from the surfing history (see fig. 25D and col. 23 lines 54-

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55; Schlack discloses a channel surf history in a viewing session in Fig. 25D. Schlack discloses the dwell time is represented in seconds (col. 23 lines 54-55). Channels having dwell times of less than one second threshold are not included in fig. 25D. The examiner understands this to mean that channels that don't have dwell times of at least one second are not "surf channels" (the viewer is not interested in programming offered on these channel and is merely changing the channel using the "channel up" or "channel down" to tune to a surf channel (a channel that may have desirable programming, therefore having a dwell time of 1 second or more) or to a top channel (see Fig. 20)).

Claim 8:

Schlack discloses wherein the parsing further comprises:

"determining, according to the set of stored processing rules, a relevant viewing event" (see col. 13 lines 15-18, col. 20 lines 33-38);

and "if a duration of the relevant viewing event is below a pre-defined surfing threshold, adjusting the total duration value of a surfing channel in the surfing history, wherein the surfing channel is a channel of the relevant viewing event" (see figs. 24 and 25B col. 23 lines 34-50; Schlack differentiates between viewing events and surf events. Dwell times for surf events and dwell times for viewing events are separate. The surf "Total Dwell Times" in fig. 25B correspond to "total duration value of a surfing channel in the surfing

history” as disclosed by the inventor. If a viewing event is below the threshold that Schlack uses to differentiate a viewing event as in fig. 24 then the surf “Total Dwell Times” column is adjusted.)

Claim 9:

Schlack discloses determining “at least one relevant viewing event according to the set of stored processing rules” (see col. 13 lines 15-18, col. 20 lines 33-38).

Claims 10 and 11:

Schlack discloses “a program probability score corresponding to the at least one relevant viewing event” (Fig. 18 shows a program probability score that a man, woman, or child corresponds to a viewing event). Schlack also uses probability to determine what type of viewer is viewing programming at certain times during a session or throughout a day (Fig. 18B) and goes on to state that his invention is not limited to distinguishing three viewer types but can use additional sets of rules and probabilities, which in conjunction with viewer interactivity data (profiles), can be used to infer viewer demographics and other attributes. Other sets of rules and probabilities could also be utilized without departing from the scope of the present invention (col. 19 line 56 to col. 20 line 59).

It is inherent that probability (program) scores stored in a viewer profile to have a value between 0 and 1 and that the sum off all the probability (program) scores in a profile

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must equal 100% or 1. Schlack discloses in Fig. 19 demographic groups with correlation to program categories. In a profile, where the viewer is the range of 0-10 years old, the viewer is likely to watch news programming 10% of the time (the program score of news programs .1, even though the news programs are grouped together in this example, probability or program scores can be assigned to individual programs as opposed to program categories as is shown in Fig. 19). Figure 19 does not show all available program categories, however the sum of all probabilities or program scores shown in the example is equal to 80% or 0.8 for a viewer profile for a viewer in the 0-10 age range. There are program categories that are not shown and are depicted by the three dots in the "categories" column, these omitted categories must have a sum of 20% probability or .2 program score. The sum of all the program scores stored in a viewer profile must equal 1 or add to 100% probability.

Schlack discloses that current session data and historical data are used to update viewer profiles (col. 7 lines 10-16) If a viewer changes his/her viewing habits to reflect a new preferred program, the probability/program score of the new favorite program can be adjusted to reflect this, however one or more other program scores or probabilities must be changed so that the sum of all probabilities or program scores in a viewer profile is equal to 100% or 1.

Claims 12 and 13:

Schlack discloses at least one genre probability score corresponding to the at least one viewing event (see fig 18A; figure 18 A shows a program (genre) probability score than a man, woman , or child corresponds to the viewing event).

Claims 14 and 15:

Schlack discloses “deleting data about the parsed stream of command signals from a television viewing personalization system” and “deleting data about the at least one **relevant** viewing event from a television viewing personalization system” (see col. 31 line 39 to col. 32 line 31; Schlack discloses deleting session data and profiles, which include “data about the parsed stream of command signals” and “data about at the least one **relevant** viewing event”).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARI SAWAGED whose telephone number is (571)270-5085. The examiner can normally be reached on Mon-Thurs, 9:00AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ANDREW KOENIG can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sari Sawaged/
Examiner, Art Unit 2623

/Andrew Y Koenig/
Supervisory Patent Examiner, Art Unit 2623